European Review for Medical and Pharmacological Sciences 2023; 27: 10951-10957

Evaluation of the perinatal anxiety and its effect on delivery type in those who want to have a vaginal birth after a cesarean section

M. KARAGÜÇ, S. TUNÇ KARAMAN, O. BASAT

Department of Family Medicine, University of Health Sciences, Gaziosmanpaşa Training and Research Hospital, Istanbul, Turkey

Abstract. – OBJECTIVE: This study aimed to investigate the level of perinatal anxiety in pregnant women who considered vaginal birth after a cesarean section (VBAC) and evaluate its effect on the type of delivery.

SUBJECTS AND METHODS: The study was planned as single-centered and analytical. It was performed with pregnant women planning VBAC, reached via Google Forms between February 23 and August 17, 2022. An online form consisting of the Patient Information Form and the Perinatal Anxiety Screening Scale-Turkish version (PASS-TR) was applied to the participants. The type of delivery was questioned by phone call.

RESULTS: Ages of 162 pregnant women ranged from 22 to 40 years (mean=31.08±3.75). 54.9% (n=89) had a gestational week of 37 or more. 83.3% (n=135) had a vaginal delivery, and 54.3% (n=88) had a score of >16 on PASS-TR. PASS-TR total and subscale scores were higher in patients with known gynecological diseases ($p<0.001$). The total score of PASS-TR was higher in those aged between 18-30 years ($p=0.027$). The total number of pregnancies was higher in those with a PASS-TR score of ≤16 ($p=0.007$). There was no statistically significant difference between the total and subscale scores of PASS-TR with the type of delivery after cesarean section.

CONCLUSIONS: Perinatal anxiety was determined in 54.3% of the pregnant women planning VBAC, and 83.3% had a successful vaginal delivery. Age, low gravida, and the presence of gynecological diseases were risk factors for anxiety. There was no relationship between the type of delivery after cesarean section and perinatal anxiety.

Key Words:
Delivery, PASS-TR, Perinatal anxiety, Pregnancy, Vaginal birth after cesarean section.

Introduction

Pregnancy and childbirth are critical experiences affecting women, both mentally and physically[1]. Due to various sociodemographic and obstetric characteristics, anxiety may occur during pregnancy[2,3]. In pregnant women with anxiety, the delivery method is also a crucial question mark[4].

It may be difficult for pregnant women to decide on the mode of birth. Pregnant women may prefer elective cesarean delivery (CD), as vaginal delivery (VD) draws a slightly bloody and painful image. However, CD is considered to be associated with negative results for both the baby and the mother. It is also considered that in a woman with a prior CD, subsequent births should also be completed with a CD. Recurrent CDs have increased the rates of CD in our country as well as worldwide[4,5].

After coming to the fore with the intention to reduce recurrent CD rates, vaginal delivery after cesarean section (VBAC) has become an option[6]. It was reported that approximately 60-88% of pregnant women with a successful VD history could achieve VBAC[7-9].

Unfortunately, the occurrence of severe complications, such as uterine rupture, has led to a bias against VBAC. For this reason, the number of centers performing VBAC is limited, and thus, the rates of VBAC are low[10].

This study aimed to investigate the level of perinatal anxiety in pregnant women who considered trying VBAC and evaluate its effect on the mode of delivery.

Subjects and Methods

This study was designed as prospective, analytical, and single-centered. Ethical permission to perform this study was obtained from the Local Ethics Committee (Approval No: 11; January 19, 2022). The study was conducted under the principles of the Declaration of Helsinki. The pregnant women included in the study were informed in

Corresponding Author: Sibel Tunç Karaman, MD; e-mail: drsibeltunc@hotmail.com; sibel.tunckaraman@saglik.gov.tr

detail, and the purpose of the study was explained. Participants who filled out the online form declared they agreed to participate in the study.

Study Design

This study was performed with 162 pregnant women who planned to undergo VBAC and met the inclusion criteria, reached via Google Forms between February 23 and August 17, 2022. An online form consisting of the Patient Information Form and the Perinatal Anxiety Screening Scale-Turkish version (PASS-TR) was applied to the participants.

Inclusion Criteria

Those who were 18 years or older, in the last trimester of their pregnancy, had a history of CD in their previous pregnancy and having at least a second pregnancy, pregnant women who did not have a condition or risk preventing VBAC, those who agreed to participate in the study, could understand and answer the questions asked were included in the study.

Exclusion Criteria

Those aged <18 years, those with obstetric, gynecological, metabolic, or musculoskeletal diseases that might have prevented vaginal delivery, those with known active psychiatric disease and medicine use, those who could not cooperate (hearing and speech disorders, impaired cognitive functions), and those who were illiterate were excluded.

Data Collection Tools

Patient information form

A patient information form was prepared by the authors, including the participants' sociodemographic characteristics (age, marital status, working status, income level), obstetric history (pregnancy, week of pregnancy, the total number of pregnancies, reason for previous CD, information about going to regular examination during pregnancy, getting information about delivery methods), information on the presence of known gynecological and chronic metabolic diseases.

Perinatal Anxiety Screening Scale

PASS, used to evaluate the risk of perinatal anxiety in pregnant women, was developed by Somerville et al[11]. The scale consists of 31 questions. It was adapted into Turkish by Yazıcı et al[12]. There are four sub-dimensions in PASS-TR: general anxiety and specific fear, perfectionism and control, social anxiety and adjustment disorder, and acute anxiety and trauma. It is a four-point Likert-type scale ranging from "Almost never" (0), "Sometimes" (1), "Often" (2), and "Almost always" (3). The cut-off point of the scale is 16, and values above this point indicate the presence of anxiety. The Cronbach's Alpha value of the Turkish version is 0.95.

Statistical Analysis

While evaluating the findings obtained in the study, the IBM SPSS Statistics 22 (IBM Corp., Armonk, NY, USA) program was used for statistical analysis. The conformity of the parameters to the normal distribution was evaluated with the Shapiro-Wilks test. In addition to descriptive statistical methods (mean, standard deviation, frequency), the Student's *t*-test was used to compare quantitative data for normally distributed parameters between two groups, and the Mann-Whitney U test for comparisons between two groups of parameters that did not show normal distribution. The Chi-square test was used to compare qualitative data. The Games-Howell Test, one of the post-hoc analyses, determined the significance level. The statistical significance was evaluated at the $p<0.05$ level.

Results

This study was performed with 162 participants whose ages ranged from 22 to 40 years (mean=31.08±3.75). While 83.3% (n=135) had a vaginal delivery, 27 (16.7%) of them underwent CD again. The distribution of various characteristics of the participants is summarized in Table I.

As indicated in Table II, 54.3% (n=88) of participants got >16 points and were found to have anxiety. Descriptive statistics of total and sub-dimension scores obtained from PASS-TR are presented in Table II.

Table III summarizes the comparison of PASS-TR total and sub-dimension scores according to the characteristics of the participants. PASS-TR total and subscale scores were higher in patients with the known gynecological disease ($p<0.001$ for all). PASS-TR total score was higher in those aged 18-30 ($p=0.027$). The total number of pregnancies was lower in those with PASS-TR total score >16 ($p=0.007$). There was no statistically significant difference between PASS-TR total and subscale scores and the type of delivery (Table III).

In Table IV, anxiety groups and various variables are compared according to PASS-TR. The total number of pregnancies demonstrated

Table I. Sociodemographic and medical characteristics of the study population (n=162).

Variables		n	%
Age	18-30 years	73	45.1
	≥31 years	89	54.9
Education level	Primary and middle school	25	15.5
	High school	43	26.5
	University	94	58.0
Working status	No	121	74.7
	Yes	41	25.3
Income status	Low	24	14.8
	Middle	109	67.3
	High	29	17.9
Chronic disease	No	144	88.9
	Yes	18	11.1
Gestational age	28-36 week	73	45.1
	≥37 week	89	54.9
Gynecological diseases	No	136	84.0
	Yes	26	16.0
Getting information about the type of delivery	Yes	144	88.9
	No	18	11.1
Regular checkups during pregnancy	Yes	152	93.8
	No	10	6.2
Type of delivery after cesarean section	Vaginal birth	135	83.3
	Cesarean section	27	16.7
		Mean±SD	
Current pregnancy		2.82±1.06	
Gravida		2.82±1.06	

Data presented as n (%) of participants and Mean±SD.

a statistically significant difference between the PASS-TR groups. It was lower in those with a PASS-TR score of more than 16 (p=0.007). No significant difference was determined between the anxiety states according to PASS-TR due to the causes of recurrent CD (Table IV).

Discussion

In this study, perinatal anxiety was observed in more than half (54.3%) of the pregnant women who tried VBAC. 83.3% of them had a successful vaginal delivery. Young age, low gravida, and the presence of known gynecological disease were determined as risk factors for anxiety. However, there was no relationship between the type of delivery after CD and perinatal anxiety.

VBAC is critical in reducing CD rates, and it was reported that approximately 60-88% successful VD rate could be achieved in studies[7-9,13] conducted with pregnant women who have tried VBAC. Our study is compatible with the literature regarding VBAC success (83.3%). This result is crucial in demonstrating that VBAC can also be an option in our country if both healthcare professionals and pregnant women are encouraged, and appropriate conditions are provided.

Previous studies[9,14,15] reported that the average age of pregnant women who attempted VBAC was around 25-30. The success rate for VBAC increased if the age was below 30. Thus, the study of Eser et al[16] revealed that 54.5% of pregnant women who planned to undergo VBAC were over the age of 30. However, there are also studies[7,17] indicating no significant difference between the mode of delivery after CD and age. Similar to Eser et al[16], the mean age of the pregnant women planning VBAC was over 30 in our study. The findings obtained from the studies may differ according

Table II. Evaluation of the PASS-TR total and subdimension scores.

	Mean±SD
PASS-TR Total score	18.80±11.65
General Anxiety and Specific Fear	6.77±4.72
Perfectionism and Control	3.80±2.70
Social Anxiety and Adjustment Disorder	3.53±3.13
Acute Anxiety and Trauma	4.68±4.11

Data presented as Mean±SD. PASS-TR: Perinatal Anxiety Screening Scale-Turkish version.

Table III. Evaluation of PASS-TR total and sub-dimension scores according to sociodemographic and clinical features of participants.

Variables	PASS-TR Total score	General Anxiety and Specific Fear	Perfectionism and Control	Social Anxiety and Adjustment Disorder	Acute Anxiety and Trauma
Age	**Mean±SD**	**Mean±SD**	**Mean±SD**	**Mean±SD**	**Mean±SD**
18-30 years	21.18±11.88	7.59±4.84	4.58±2.96	3.84±3.44	5.18±4.48
≥31 years	16.85±11.16	6.11±4.55	3.18±2.30	3.28±2.86	4.28±3.77
p	**0.027***	0.073	**0.002***	0.383	0.273
Education level	**Mean±SD**	**Mean±SD**	**Mean±SD**	**Mean±SD**	**Mean±SD**
Primary and middle school	17.92±12.26	5.44±3.95	3.40±2.71	3.96±2.89	5.12±4.57
High school	18.79±10.27	6.49±3.97	3.86±2.49	3.86±2.95	4.58±4.20
University	19.04±12.19	7.27±5.17	3.89±2.81	3.27±3.28	4.62±3.99
p	0.916	0.322	0.766	0.207	0.879
Income status	**Mean±SD**	**Mean±SD**	**Mean±SD**	**Mean±SD**	**Mean±SD**
Low	19.92±13.43	5.79±4.13	3.79±2.81	4.21±3.30	6.13±5.48
Middle	18.66±11.33	6.76±4.56	3.83±2.66	3.58±3.27	4.49±3.97
High	18.41±11.70	7.66±5.70	3.72±2.86	2.79±2.34	4.24±3.15
p	0.873	0.550	0.933	0.343	0.531
Chronic diseases	**Mean±SD**	**Mean±SD**	**Mean±SD**	**Mean±SD**	**Mean±SD**
No	18.80±11.35	6.92±4.79	3.78±2.59	3.44±2.89	4.66±4.11
Yes	18.83±14.23	5.67±4.13	4.00±3.55	4.28±4.69	4.89±4.28
p	0.677	0.335	0.776	0.870	0.826
Gestational age	**Mean±SD**	**Mean±SD**	**Mean±SD**	**Mean±SD**	**Mean±SD**
28-36 week	19.10±11.37	6.82±4.74	4.16±2.79	3.37±3.41	4.74±3.98
≥37 week	18.56±11.95	6.74±4.74	3.52±2.61	3.66±2.90	4.64±4.25
p	0.856	0.958	0.112	0.255	0.743
Gynecological diseases	**Mean±SD**	**Mean±SD**	**Mean±SD**	**Mean±SD**	**Mean±SD**
No	17.24±10.86	6.38±4.72	3.57±2.62	3.13±2.79	4.16±3.75
Yes	27.00±12.46	8.88±4.23	5.08±2.83	5.62±4.00	7.42±4.88
p	**<0.001***	**0.004***	**0.018***	**0.002***	**0.001***
Regular checkups during pregnancy	**Mean±SD**	**Mean±SD**	**Mean±SD**	**Mean±SD**	**Mean±SD**
Yes	19.14±11.82	6.90±4.74	3.88±2.71	3.61±3.18	4.76±4.19
No	13.70±7.48	4.90±4.18	2.80±2.44	2.40±2.07	3.60±2.59
p	0.171	0.217	0.296	0.299	0.540
Getting information about the type of delivery	**Mean±SD**	**Mean±SD**	**Mean±SD**	**Mean±SD**	**Mean±SD**
No	22.61±13.50	8.39±6.13	3.89±3.10	4.11±3.27	6.22±4.17
Yes	18.33±11.37	6.58±4.51	3.80±2.66	3.46±3.12	4.49±4.08
p	0.153	0.237	0.987	0.404	0.063
Type of delivery	**Mean±SD**	**Mean±SD**	**Mean±SD**	**Mean±SD**	**Mean±SD**
Vaginal birth	18.27±11.85	6.53±4.56	3.65±2.71	3.37±3.14	4.72±4.30
Cesarean section	21.48±10.41	8.04±5.37	4.59±2.61	4.33±3.05	4.52±3.09
p	0.117	0.209	0.088	0.093	0.760

Data presented as Mean±SD. Kruskal-Wallis test, Mann-Whitney U test. *$p<0.05$. PASS-TR: Perinatal Anxiety Screening Scale-Turkish version.

to the distribution of sociocultural factors in the researched population. VBAC awareness in the research area may be an influencing factor.

Although there is limited information in the literature regarding the education level of those planning to undergo VBAC, a study[18] from India revealed that women with secondary education at least attempt to do VBAC more. Unlike Thomas et al[18], most of our participants had a high level of education. The increase in health

Table IV. Comparison of some variables according to PASS-TR cut-off levels.

	PASS-TR total score		
	≤16	>16	
Reason for repeat cesarean section (n=27)	**n (%)**	**n (%)**	*p*
Fear of vaginal birth	2 (33.3)	4 (66.7)	0.675
Others	9 (42.9)	12 (57.1)	
	Mean±SD	**Mean±SD**	
Gravida (n=162)	3.06±1.11	2.61±0.97	**0.007***

Chi-Square test, Mann-Whitney U test. *$p<0.05$. PASS-TR: Perinatal Anxiety Screening Scale-Turkish version.

literacy as the education level increases may have increased access to the limited number of centers where VBAC is applied.

Anxiety levels seen in different periods of pregnancy can change with the effect of physical and hormonal changes. Some studies[2,19] revealed the level of anxiety to be significant in the second trimester and generally higher in the third trimester. In our study, in which we only included pregnant women in the third trimester, the level of anxiety was high (54.3%), in line with the literature. Even though anxiety was low at the beginning of pregnancy in those planning VBAC, as in others, it is expected to increase gradually until the third trimester.

Many factors affect the level of anxiety in pregnancy. Studies[2,19] have reported that young age negatively affects anxiety in pregnant women. On the contrary, Tearne et al[20] demonstrated that depression and anxiety increase with advancing age. In a study performed in Egypt, severe anxiety was observed in most women aged 35 and over[21]. In the studies of Bayrampour et al[22] and Arslantaş et al[23], there was no relationship between age and pregnancy anxiety. Our study indicated that anxiety was lower in pregnant women aged 31 and over. Anxiety may increase due to lack of experience in pregnant women at an early age. As age progresses, experience and, therefore, coping and solution skills also increase.

The lack of experience and knowledge negatively affects the level of anxiety in first pregnancies as well as at young ages. A study[2] reported nulliparous women experience more pregnancy anxiety in the third trimester than multiparous women. Thomas et al[18] also determined low parity to be significantly associated with higher anxiety compared to PASS-TR. Contrary to these studies, Størksen et al[24] observed that multiparous women had more anxiety at birth than primiparous women. Arslantaş et al[23] did not demonstrate a significant relationship between the number of pregnancies and anxiety. In our study, the anxiety levels of those with a high number of pregnancies were significantly lower than those with fewer, consistent with the literature.

Anxiety during pregnancy contributes to developing the fear of childbirth by losing confidence in the birth process. Pregnant women with high anxiety are more likely to have CD[25]. Fear of VD is one of the most critical factors that increase anxiety during pregnancy and cause the pregnancy to end with CD[26]. A study conducted with pregnant women suitable for VBAC revealed that one-third of pregnant women with recurrent CD had repeated CDs due to fear of VD[27]. In the study of Eser et al[16], no significant relationship was determined between the fear of VD and the mode of delivery. In our study, the existing anxiety did not affect the type of delivery. It was determined that 6 of 27 pregnant women who had CD again had CD because of fear of VD. However, this result was not statistically significant among all pregnant women planning VBAC. It was concluded that our participants consisted of only pregnant women who planned to undergo VBAC. Unlike the general pregnant population, these women had already decided on the type of delivery with VD, which may have prevented the negative effects of anxiety from being monitored.

Finally, as seen in the literature, the VBAC method was not considered as an option in patients with gynecological disease, because of fear of the risk of complications. In our study, those with any known gynecological disease were relatively few, but their anxiety was higher than those without. More detailed studies are needed to address the implications of gynecological diseases.

Limitations and Strengths of the Study

The main limitation was that our results represented only a limited number of pregnant women planning VBAC due to the limited health

services supporting them. The strength of our study was that it was one of the limited numbers of studies on VBAC in our country.

Conclusions

While perinatal anxiety was observed in more than half (54.3%) of the pregnant women planning to undergo VBAC, 83.3% had a successful vaginal delivery. Anxiety was higher in those who were younger, had a low total number of pregnancies, and had a history of gynecological disease. Although no relationship was determined between the type of delivery after CD and the levels of perinatal anxiety, this situation is considered to be clarified with further studies with larger samples.

Conflict of Interest

The authors declare that they have no competing interests, financial or otherwise, related to the current work.

Funding

There was no source of funding for this research.

Ethics Approval

Ethics approval was obtained from The Clinical Research Ethics Committee of the University of Health Sciences Turkey, Gaziosmanpasa Training and Research Hospital (Date: 19/01/2022, Approval No.: 11).

Informed Consent

Participants were informed about the procedure and their written consent was obtained.

Authors' Contributions

STK: project development, data analysis, and interpretation, manuscript writing and editing, reviewed manuscript. MK: project development, data collection, data analysis and interpretation, manuscript writing, reviewed manuscript. OB: project development, data analysis, and interpretation, manuscript writing and editing, reviewed manuscript.

Data Availability

The study data were stored. The data used and analyzed during the current study could be available from the corresponding author upon reasonable request.

ORCID ID

Tunç Karaman: 0000-0003-1833-8758
Karagüç: 0000-0001-7351-692X
Basat: 0000-0002-5222-9136.

References

1) Jyoti R, Sharma M, Pareek S. The effects and outcomes of different maternal positions on the second stage of labor. MRIMS J Health Sci 2022; 10: 21-24.
2) Madhavanprabhakaran GK, D'Souza MS, Nairy KS. Prevalence of pregnancy anxiety and associated factors. Int J Afr Nurs Sci 2015; 3: 1-7.
3) Sun Y, Huang K, Hu Y, Yan S, Xu Y, Zhu P, Tao F. Pregnancy-specific anxiety and elective cesarean section in primiparas: A cohort study in China. PLoS One 2019; 14: e0216870.
4) Ay GG, Duran ET. Investigation of perpectives on vaginal birth after cesarean of women who have delivered by cesarean method. JEUNF 2019; 38: 183-192.
5) World Health Organization. Caesarean section rates continue to rise, amid growing inequalities in access. Available at: https://www.who.int/news/item/16-06-2021-caesarean-section-rates-continue-to-rise-amid-growing-inequalities-in-access (Accessed 20.01.2022).
6) Chen YT, Hsieh YC, Shen H, Cheng CH, Lee KH, Torng PL. Vaginal birth after cesarean section: Experience from a regional hospital. Taiwan J Obstet Gynecol 2022; 61: 422-426.
7) Sahin S, Ozkaya E, Eroglu M, Sanverdi I, Celik Z, Cakıroglu A. Predictors of successful vaginal birth after a caesarean in women with a previous single caesarean delivery. Eur Rev Med Pharmacol Sci 2022; 26: 1594-1600.
8) Takeya A, Adachi E, Takahashi Y, Kondoh E, Mandai M, Nakayama T. Trial of labor after cesarean delivery (TOLAC) in Japan: rates and complications. Arch Gynecol Obstet 2020; 301: 995-1001.
9) İzbudak G, Tozkır E, Cogendez E, Uzun F, Eser SK. Comparison of maternal-neonatal results of vaginal birth after cesarean and elective repeat cesarean delivery. Ginekol Pol 2021; 92: 306-311.
10) ACOG Practice Bulletin No. 205: Vaginal Birth After Cesarean Delivery. Obstet Gynecol 2019; 133: 110-127.
11) Somerville S, Dedman K, Hagan R, Oxnam E, Wettinger M, Byrne S, Coo S, Doherty D, Page AC. The Perinatal Anxiety Screening Scale: development and preliminary validation. Arch Womens Ment Health 2014; 17: 443-454.
12) Yazıcı E, Mutu Pek T, Uslu Yuvacı H, Köse E, Cevrioglu S, Yazıcı AB, Çilli AS, Erol A, Aydın N. Perinatal Anxiety Screening Scale validiy and reliability study in Turkish (PASS-TR validity and reliability). Psychiatry Clin Psychopharmacol 2019; 29: 609-617.
13) Clarke M, Devane D, Gross MM, Morano S, Lundgren I, Sinclair M, Putman K, Beech B, Vehviläinen-Julkunen K, Nieuwenhuijze M, Wiseman H, Smith V, Daly D, Savage G, Newell J, Simpkin A, Grylka-Baeschlin S, Healy P, Nicoletti J, Lalor J, Carroll M, van Limbeek E, Nilsson C, Stockdale J, Fobelets M, Begley C. OptiBIRTH: A cluster randomised trial of a complex intervention to increase vaginal birth after caesarean section. BMC Pregnancy Childbirth 2020; 20: 143.

14) Kavak SB, Kavak EÇ, Kurkut, B, Atılgan R, Şahin Ö, İlhan R, Başpınar M, Kaplan S, Sapmaz E. Retrospective evaluation of vaginal delivery after cesarean. Turkiye Klinikleri J Gynecol Obst 2013; 23: 215-219

15) Madi JM, Deon J, Rombaldi RL, de Araújo BF, Rombaldi MC, dos Santos MB. Impact of vaginal delivery after a previous cesarean section on perinatal outcomes. Rev Bras Ginecol Obstet 2013; 35: 516-522

16) Eser A, Yılmaz Esencan T, Keskin S. Investigation of Relationship Between Mode of Delivery and Fear of Childbirth in Candidates of Vaginal Birth after Cesarean Section. Online Turkish Journal of Health Sciences 2021; 6: 419-425.

17) He X, Dai Q, Wu X, Zhou J, Li J. Outcomes and risk factors for failed trial of labor after cesarean delivery (TOLAC) in women with one previous cesarean section: a Chinese population-based study. BMC Pregnancy Childbirth 2022; 22: 676.

18) Thomas CZ, Surekha A, Puthur KJ, Kiran P, Sulekha T. Screening for anxiety among antenatal women attending a taluk Hospital in rural India. Ntl J Community Med 2015; 6: 313-317.

19) Shrestha S, Pun KD. Anxiety on primigravid women attending antenatal care: a hospital based cross-sectional study. Kathmandu Univ Med J 2018; 16: 23-27.

20) Tearne JE, Robinson M, Jacoby P, Allen KL, Cunningham NK, Li J, McLean NJ. Older maternal age is associated with depression, anxiety, and stress symptoms in young adult female offspring. J Abnorm Psychol 2016; 125: 1-10.

21) Osman SA, Elsayed HF, Metwally NS. Effect of Anxiety and Depression Symptoms on Pregnancy and Birth Outcome. IJNRHN 2019; 6: 124-138.

22) Bayrampour H, Salmon C, Vinturache A, Tough S. Effect of depressive and anxiety symptoms during pregnancy on risk of obstetric interventions. J Obstet Gynaecol 2015; 41: 1040-1048.

23) Arslantaş H, Çoban A, Dereboy F, Ezgi S, Şahbaz M, Kurnaz D. Factors effecting delivery fear in last trimester pregnant women and its relationship with postpartum depression and maternal attachment. Cukurova Med J 2020; 45: 239-250.

24) Størksen HT, Garthus-Niegel S, Adams SS, Vangen S, Eberhard-Gran M. Fear of childbirth and elective caesarean section: A population-based study. BMC Pregnancy Childbirth 2015; 15: 1-10.

25) Pavlov M, Steiner N, Kessous R, Weintraub AY, Sheiner E. Obstetric and neonatal outcome in patients with anxiety disorders. J Matern Fetal Neonatal Med 2014; 27: 1339-1342.

26) Bülbül T, Özen B, Çopur A, Kayacık F. Investigation the fear of labor and decision making about delivery type in pregnant. Sağlık Bilimleri Dergisi 2016; 25: 126-130.

27) Nkhata, G. Factors associated with failed vaginal delivery in women with one previous caesarean section at the university teaching hospital, Lusaka, Zambia. 2019 (PhD Thesis, The University of Zambia). Available at: http://dspace.unza.zm/handle/123456789/7280.